SECTION 712

CONSTRUCTION FABRICS

Description. This Section covers fabrics to be used for reinforcement of asphalt pavements and filter fabric for various uses.

712.01. FABRIC REINFORCEMENT FOR ASPHALT CONCRETE PAVEMENT.

(a) **General.** The fabric shall meet the requirements for paving in AASHTO M 288.

(b) **Packaging and Storing.** The fabric shall be supplied by the manufacturer in rolls of standard widths and lengths uniformly wound onto suitable cylinder forms or cores to aid in handling and unrolling by the use of mechanical laydown equipment. The rolls that are supplied shall provide full coverage of the pavement with a minimal number of joint splices.

Wrap the rolls of fabric for protection against sunlight and moisture. When stored outdoors, elevate the rolls and cover them with a tarpaulin.

(c) **Sampling and Testing.** Furnish a type A materials certification for the reinforcement fabric in accordance with Subsection 106.04. Also, furnish a 3 square yard (2.5 square meter) sample of the fabric for testing to the Materials Engineer from each lot or shipment by the Engineer.

712.02. FILTER FABRIC FOR GABIONS.

(a) **General.** The fabric shall meet the requirements for separation in AASHTO M 288. A non-woven fabric is required.

(b) **Acceptance.** Furnish a type D material certification for the fabric in accordance with Subsection 106.04. Also, furnish a 3 square yard (2.5 square meter) sample of the fabric for testing to the Materials Engineer from each lot or shipment by the Engineer.

712.03. GEOTEXTILES FOR SUBSURFACE DRAINAGE PURPOSES.

(a) **General.** This Subsection covers geotextiles to be used in conjunction with pipe underdrain and other drainage systems. The fabric shall meet the requirements of AASHTO M 288. In addition, use AASHTO M288 Subsurface Drainage, Table 2 with 15% to 50% of in situ soil passing the No. 200 (75 µm) sieve.

(b) **Acceptance.** Furnish a type D material certification for the fabric in accordance with Subsection 106.04. Also, furnish a 3 square yard (2.5 square meter) sample of the fabric for testing to the Materials Engineer from each lot or shipment by the Engineer.

712.04. FILTER FABRIC FOR USE WITH RIPRAP.

(a) **General.** This Subsection describes a pervious fabric to be used under riprap for slope protection. The fabric shall meet the requirements for separation in AASHTO M 288. A non-woven fabric is required.

(b) **Acceptance.** Furnish a type D material certification for the fabric in accordance with Subsection 106.04. Also, furnish a 3 square yard (2.5 square meter) sample of the fabric for testing to the Materials Engineer from each lot or shipment by the Engineer.

712.05. SEPARATOR FABRIC FOR BASES.

(a) **General.** This Subsection describes a pervious fabric to be used under base courses for separation. The fabric shall meet the requirements for separation in AASHTO M 288. A non-woven fabric is required.

(b) **Acceptance.** Furnish a type A certification for the fabric in accordance with Subsection 106.04. Also, furnish a 3 square yard (2.5 square meter) sample of the fabric for testing to the Materials Engineer from each lot or shipment by the Engineer.

712.06. FILTER FABRIC FOR SILT FENCE.

(a) **General.** This Subsection describes fabric to be used for the removal of soil particles from water flowing through the fence. The fabric shall meet the requirements for temporary silt fence in AASHTO M 288. In addition, use AASHTO M288, Table 6, Unsupported Silt Fence with an elongation less than 50%.

(b) **Acceptance.** Furnish a type D material certification for the fabric in accordance with Subsection 106.04. Also, furnish a 3 square yard (2.5 square meter) sample of the fabric for testing to the Materials Engineer from each lot or shipment by the Engineer.

SECTION 713

STONE FOR RIPRAP, FILTER BLANKET, AND GABIONS

713.01. MATERIALS COVERED.

This Section covers stone for plain riprap, laid up riprap or grouted riprap, stone for special plain riprap, and materials for filter blanket and gabions.

713.02. RIPRAP STONE.

Stone for riprap shall be hard, sound, and durable, and shall be approved by the Engineer prior to use. Submit samples of the stone to be used to the Materials Engineer for approval before any stone is used.

Determine tests for mass/unit volume and absorption in accordance with ASTM C 97. The minimum mass/unit volume shall be 140 lbs/ft^3 (2,243 kg/m^3), and the maximum absorption shall be 6 percent.

Soundness (freeze and thaw test) loss of the stone after 20 cycles shall not exceed 15 percent when tested in accordance with the Corps of Engineers test method CRD-C 144.

The size of stone for the various kinds of riprap shall be as follows: